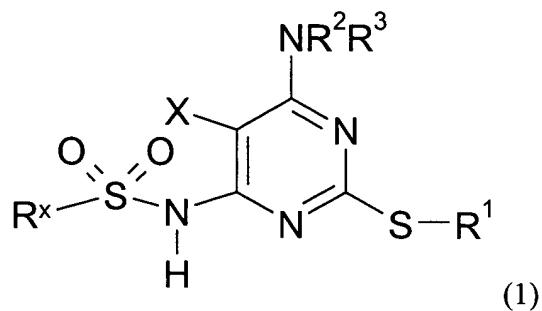


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A compound of formula (1), pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof:



wherein R¹ is a group selected from C₃₋₇carbocyclyl, C₁₋₈alkyl, C₂₋₆alkenyl and C₂₋₆alkynyl; wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from fluoro, nitrile, -OR⁴, -NR⁵R⁶, -CONR⁵R⁶, -COOR⁷, -NR⁸COR⁹, -SR¹⁰, -SO₂R¹⁰, -SO₂NR⁵R⁶, -NR⁸SO₂R⁹, phenyl or heteroaryl; wherein phenyl and heteroaryl are optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR⁴, -NR⁵R⁶, -CONR⁵R⁶, -COOR⁷, -NR⁸COR⁹, -SR¹⁰, -SO₂R¹⁰, -SO₂NR⁵R⁶, -NR⁸SO₂R⁹, C₁₋₆alkyl and trifluoromethyl;

wherein R² is C₃₋₇carbocyclyl, optionally substituted by 1, 2 or 3 substituents independently selected from:

- (a) fluoro, -OR⁴, -NR⁵R⁶ -CONR⁵R⁶, -COOR⁷, -NR⁸COR⁹, -SR¹⁰, -SO₂R¹⁰, -SO₂NR⁵R⁶, -NR⁸SO₂R⁹;
- (b) a 3-8 membered ring optionally containing 1, 2 or 3 atoms selected from O, S, -NR⁸ and whereby the ring is optionally substituted by C₁₋₃alkyl or fluoro; or
- (c) phenyl or heteroaryl, each of which is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR⁴, -NR⁵R⁶, -CONR⁵R⁶, -NR⁸COR⁹, -SO₂NR⁵R⁶, -NR⁸SO₂R⁹, C₁₋₆alkyl and trifluoromethyl;

or R² is a group selected from C₁₋₈alkyl, C₂₋₆alkenyl or C₂₋₆alkynyl wherein the group is substituted by 1, 2 or 3 substituents independently selected from hydroxy, amino, C₁₋₆alkoxy, C₁₋₆alkylamino, di(C₁₋₆alkyl)amino, N-(C₁₋₆alkyl)-N-(phenyl)amino, N-C₁₋₆alkylcarbamoyl, N,N-di(C₁₋₆alkyl)carbamoyl, N-(C₁₋₆alkyl)-N-(phenyl)carbamoyl, carboxy, phenoxy carbonyl, -NR⁸COR⁹, -SO₂R¹⁰, -SO₂NR⁵R⁶ and -NR⁸SO₂R⁹;

wherein R³ is hydrogen or independently R²;

R⁴ is hydrogen or a group selected from C₁₋₆alkyl and phenyl, wherein the group is optionally substituted by 1 or 2 substituents independently selected from halo, phenyl, -OR¹¹ and -NR¹²R¹³;

R⁵ and R⁶ are independently hydrogen or a group selected from C₁₋₆alkyl and phenyl wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, phenyl, -OR¹⁴, -NR¹⁵R¹⁶, -COOR¹⁴, -CONR¹⁵R¹⁶, -NR¹⁵COR¹⁶, -SO₂R¹⁰, -SONR¹⁵R¹⁶ and NR¹⁵SO₂R¹⁶ or

R⁵ and R⁶ together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring system optionally containing a further heteroatom selected from oxygen and nitrogen atoms, which ring is optionally substituted by 1, 2 or 3 substituents independently selected from phenyl, -OR¹⁴, -COOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁵R¹⁶, -NR¹⁵COR¹⁶, -

SO_2R^{10} , $-\text{SONR}^{15}\text{R}^{16}$, $\text{NR}^{15}\text{SO}_2\text{R}^{16}$ or $\text{C}_{1-6}\text{alkyl}$ (optionally substituted by 1 or 2 substituents independently selected from halo, $-\text{NR}^{15}\text{R}^{16}$ and $-\text{OR}^{17}$ groups);

R^{10} is hydrogen or a group selected from $\text{C}_{1-6}\text{alkyl}$ or phenyl, wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, phenyl, $-\text{OR}^{17}$ and $-\text{NR}^{15}\text{R}^{16}$; and

each of R^7 , R^8 , R^9 , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} is independently hydrogen, $\text{C}_{1-6}\text{alkyl}$ or phenyl;

X is hydrogen, halo, cyano, nitro, hydroxy, $\text{C}_{1-6}\text{alkoxy}$ (optionally substituted by 1 or 2 substituents selected from halo, $-\text{OR}^{11}$ and $-\text{NR}^{12}\text{R}^{13}$), $-\text{NR}^5\text{R}^6$, $-\text{COOR}^7$, $-\text{NR}^8\text{COR}^9$, thio, $\text{C}_{1-6}\text{alkylthio}$ (optionally substituted by 1 or 2 substituents selected from halo, $-\text{OR}^{17}$, $-\text{NR}^{15}\text{R}^{16}$), $-\text{SO}_2\text{R}^{10}$ or a group selected from $\text{C}_{3-7}\text{carbocyclyl}$, $\text{C}_{1-8}\text{alkyl}$, $\text{C}_{2-6}\text{alkenyl}$ or $\text{C}_{2-6}\text{alkynyl}$, wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, $-\text{OR}^4$, $-\text{NR}^5\text{R}^6$, $-\text{CONR}^5\text{R}^6$, $-\text{COOR}^7$, $-\text{NR}^8\text{COR}^9$, $-\text{SR}^{10}$, $-\text{SO}_2\text{R}^{10}$, $-\text{SO}_2\text{NR}^5\text{R}^6$ and $-\text{NR}^8\text{SO}_2\text{R}^9$;

R^x is trifluoromethyl, $-\text{NR}^5\text{R}^6$, phenyl, napthyl, monocyclic or bicyclic heteroaryl wherein a heteroring may be partially or fully saturated and one or more ring carbon atoms may form a carbonyl group, and wherein each phenyl or heteroaryl group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, $-\text{OR}^4$, $-\text{NR}^5\text{R}^6$, $-\text{CONR}^5\text{R}^6$, $-\text{COR}^7$, $-\text{COOR}^7$, $-\text{NR}^8\text{COR}^9$, $-\text{SR}^{10}$, $-\text{SO}_2\text{R}^{10}$, $-\text{SO}_2\text{NR}^5\text{R}^6$, $-\text{NR}^8\text{SO}_2\text{R}^9$, $\text{C}_{1-6}\text{alkyl}$ or trifluoromethyl; or R^x is a group selected from $\text{C}_{3-7}\text{carbocyclyl}$, $\text{C}_{1-8}\text{alkyl}$, $\text{C}_{2-6}\text{alkenyl}$ and $\text{C}_{2-6}\text{alkynyl}$ whereby the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, $-\text{OR}^4$, $-\text{NR}^5\text{R}^6$, $-\text{CONR}^5\text{R}^6$, $-\text{COR}^7$, $-\text{COOR}^7$, $-\text{NR}^8\text{COR}^9$, $-\text{SR}^{10}$, $-\text{SO}_2\text{R}^{10}$, $-\text{SO}_2\text{NR}^5\text{R}^6$, $-\text{NR}^8\text{SO}_2\text{R}^9$, phenyl or heteroaryl; and wherein each phenyl or heteroaryl group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, $-\text{OR}^4$, $-\text{NR}^5\text{R}^6$, $-\text{CONR}^5\text{R}^6$, $-\text{COR}^7$, $-\text{COOR}^7$, $-\text{NR}^8\text{COR}^9$, $-\text{SR}^{10}$, $-\text{SO}_2\text{R}^{10}$, $-\text{SO}_2\text{NR}^5\text{R}^6$, $-\text{NR}^8\text{SO}_2\text{R}^9$, $\text{C}_{1-6}\text{alkyl}$ or trifluoromethyl;

or R^x and X together form a 4 to 8-membered sulfonamide ring optionally substituted by 1, 2 or 3 substituents independently selected from halo, $-OR^4$, $-NR^5R^6$, $-CONR^5R^6$, $-COOR^7$, $-NR^8COR^9$, $-SR^{10}$, $-SO_2R^{10}$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$, phenyl or heteroaryl; wherein phenyl and heteroaryl are optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, $-OR^4$, $-NR^5R^6$, $-CONR^5R^6$, $-COOR^7$, $-NR^8COR^9$, $-SR^{10}$, $-SO_2R^{10}$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$, C_{1-6} alkyl and trifluoromethyl.

2. (Original) A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to claim 1 wherein R^2 is C_{1-8} alkyl optionally substituted by 1 or 2 hydroxy substituents.
3. (Original) A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to claim 1 wherein R^1 is benzyl optionally substituted by 1, 2 or 3 substituents independently selected from fluoro, chloro, bromo, methoxy, methyl and trifluoromethyl.
4. (Currently amended) A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to claim 1 wherein R^3 is hydrogen.
5. (Currently amended) A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to claim 1 wherein X is hydrogen.
6. (Currently amended) A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to claim 1 wherein R^x is methyl, 1-methylimidazolyl, 1,2-dimethylimidazolyl, *N,N*-dimethylamino, azetidinyl, pyrrolidinyl, morpholinyl and piperidinyl.
7. (Original) A compound selected from the group consisting of:

N-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)methanesulfonamide

N-[2-[(3-Chloro-2-fluorobenzyl)thio]-6-[(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-4-morpholinesulfonamide

N-[2-[(3-Chloro-2-fluorophenyl)methyl]thio]-6-[(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-1,2-dimethyl-1*H*-imidazole-4-sulfonamide

N-(2-[(2,3-Difluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)piperidine-1-sulfonamide

N-(2-[(2,3-Difluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)pyrrolidine-1-sulfonamide

N-(2-[(2,3-Difluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)azetidine-1-sulfonamide

N-{6-{{[(1*R*)-2-Hydroxy-1-methylethyl]amino}-2-[(2,3,4-trifluorobenzyl)thio]-pyrimidin-4-yl}morpholine-4-sulfonamide

N-(2-[(2,3-Difluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)morpholine-4-sulfonamide

N-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)azetidine-1-sulfonamide

N-{6-{{[(1*R*)-2-Hydroxy-1-methylethyl]amino}-2-[(2,3,4-trifluorobenzyl)thio]-pyrimidin-4-yl}azetidine-1-sulfonamide

N-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-{{[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)-*N,N*-dimethylsulfamide

N-[2-[(3-Chloro-2-fluorophenyl)methyl]thio]-6-[(*R*)-(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-1-methyl-1*H*-imidazole-4-sulfonamide;

and a pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof.

8. (Cancelled)

9. (Currently amended) A method for the treatment of asthma, allergic rhinitis, COPD, inflammatory bowel disease, osteoarthritis, osteoporosis, rheumatoid arthritis, or psoriasis comprising administering a A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to any one of claims 1 to 7 claim 1 for use as a medicament for the treatment of asthma, allergic rhinitis, COPD, inflammatory bowel disease, osteoarthritis, osteoporosis, rheumatoid arthritis, or psoriasis.

10. (Currently amended) A method for the treatment of cancer comprising administering a A compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to any one of claims 1 to 7 claim 1, for use as a medicament for the treatment of cancer.

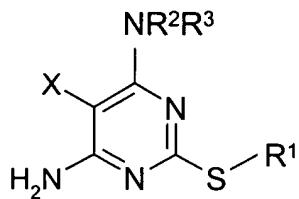
11. (Currently amended) A method for the treatment of a human disease or condition in which modulation of chemokine receptor activity is beneficial comprising administering The use of a compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof, according to any one of claims 1 to 7 claim 1 in the manufacture of a medicament for the treatment of human diseases or conditions in which modulation of chemokine receptor activity is beneficial.

12-13. (Cancelled)

14. (Currently amended) A pharmaceutical composition comprising a compound, pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof according to any one of claims 1 to 7 claim 1; and a pharmaceutically-acceptable diluent or carrier.

15. (Currently amended) A process for the preparation of a compound according to claim 1 comprising the steps of:

a) treating a compound of formula (2):

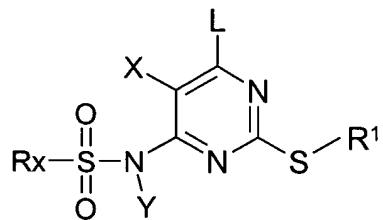


(2)

wherein R¹, R², R³ and X are as defined in claim 1, with sulfonyl chlorides (R^xSO₂Cl where R^x is as defined in claim 1;

or

b) treating a compound of formula (7):

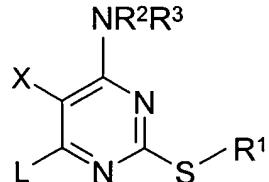


(7)

wherein R¹, R^x and X are as defined in formula (1) claim 1, L is a halogen and Y is either hydrogen or a protecting group with nucleophilic amines of the type NR²R³ as defined in formula (1) claim 1 in the presence or absence of a suitable base and solvent;

or

c) treating a compound of formula (8):



(8)

wherein R¹, R^x and X are as defined in claim 1 formula (1) and L is halogen, with sulfonamides of formula R^xSO₂NH₂ where R^x is as defined in claim 1 formula (1) except NR⁵R⁶ in the presence of a suitable base and solvent.

and

independently for each of process variants a), b) or c), optionally thereafter (i), (ii), (iii), (iv) or (v) in any order:

- i) removing any protecting groups;
- ii) converting the compound of formula (1) into a further compound of formula (1)
- iii) forming a salt
- iv) forming a prodrug
- v) forming an *in vivo* hydrolysable ester.

16. (Currently amended) A combination therapy which comprises administering a compound of formula (1) as defined in claim 1 or a pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof, or a pharmaceutical composition or formulation comprising a compound of formula (1) as defined in claim 1, concurrently or sequentially with other therapy and/or another pharmaceutical agent.

17. (Currently amended) A combination therapy as claimed in claim 16 ~~for the treatment wherein the amount of the compound in the composition is effective for treating of~~ asthma, allergic rhinitis, COPD, inflammatory bowel disease, irritable bowel syndrome, osteoarthritis, osteoporosis, rheumatoid arthritis, or psoriasis.

18. (Currently amended) A combination therapy as claimed in claim 16 ~~for the treatment wherein the amount of the compound in the composition is effective for treating of~~ cancer.

19. (Currently amended) A pharmaceutical composition which comprises a compound of formula (1) as defined in claim 1 or a pharmaceutically acceptable salt, solvate or *in vivo* hydrolysable ester thereof, in conjunction with another pharmaceutical agent.

20. (Currently amended) A pharmaceutical composition as claimed in claim 19 ~~for the treatment of wherein the amount of the compound in the composition is effective for treating~~ asthma, allergic rhinitis, COPD, inflammatory bowel disease, irritable bowel syndrome, osteoarthritis, osteoporosis, rheumatoid arthritis, or psoriasis.

21. (Currently amended) A pharmaceutical composition as claimed in claim 19 ~~for the treatment of wherein the amount of the compound in the composition is effective for treating~~ cancer.